Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A reading apparatus for obtaining a line of image data stored on a surface, the reading apparatus comprising:

(a) a radiation source for directing a line of stimulating radiation onto a stimulable image carrier on the surface, generating a line of image-bearing radiation thereby;

(b) a sensing head for obtaining image data from the line of image-bearing radiation excited from the image carrier, the sensing head including an array of sensors and having a plurality of channels, each channel sensing a segment of the line of image-bearing radiation, each channel comprising:

(i) inverting optics for inverting the segment of the line of image-bearing radiation to form an inverted line segment image; and

(ii) a corresponding sensor from the array of sensors for providing image data for the inverted line segment image; and

(c) an image processor for accepting the image data obtained from each of the sensing head channels and forming a line of image data according to the line of image-bearing radiation.

2. (Original) A reading apparatus according to claim 1 wherein the radiation source comprises a laser.

3. (Original) A reading apparatus according to claim 1 wherein the sensor comprises a charge-coupled device.

4. (Original) A reading apparatus according to claim 3 wherein the sensor is a time delayed integration sensor.

5. (Original) A reading apparatus according to claim 1 wherein the sensor comprises a CMOS device.

6. (Original) A reading apparatus according to claim 1 wherein the inverting optics are arranged in a shifted pattern, such that adjacent channels are spatially shifted with respect to the width of the line of excited radiation.

7. (Original) A reading apparatus according to claim 1 wherein the inverting optics provide magnification greater than 1:-1.

8. (Original) A reading apparatus according to claim 1 wherein the inverting optics provide magnification less than 1:-1.

9. (Original) A reading apparatus according to claim 1 further comprising a transport mechanism for controllably urging the image carrier past the sensing head for obtaining sequential lines of image data.

10. (Currently Amended) A reading apparatus for obtaining image data stored on a surface, comprising:

(a) a radiation source for directing a line of stimulating radiation onto a stimulable image carrier on the surface, generating a line of image-bearing radiation thereby;

(b) a sensing head for obtaining image data from the line of image-bearing radiation excited from the image carrier, the sensing head <u>including an array of sensors and</u> having a plurality of channels, each channel sensing a segment of the line of image-bearing radiation, each channel comprising:

(i) inverting optics for inverting the segment of the line of image-bearing radiation to form an inverted line segment image; and

(ii) a <u>corresponding</u> sensor <u>from the array of sensors</u> for providing image data for the inverted line segment image;

(c) an image processor for accepting the image data obtained from each of the sensing head channels and forming a line of image data according to the line of image-bearing radiation; and

(d) a transport mechanism for controllably urging the image carrier past the sensing head for obtaining sequential lines of image data.

11. (Original) A reading apparatus according to claim 10 wherein the radiation source comprises a laser.

12. (Original) A reading apparatus according to claim 10 wherein the sensor comprises a charge-coupled device.

13. (Original) A reading apparatus according to claim 12 wherein the sensor is a time delayed integration sensor.

14. (Original) A reading apparatus according to claim 10 wherein the sensor comprises a CMOS device.

15. (Original) A reading apparatus according to claim 10 wherein the inverting optics are arranged in a shifted pattern, such that adjacent channels are spatially shifted with respect to the width of the line of excited radiation.

16. (Original) A reading apparatus according to claim 10 wherein the inverting optics provide magnification greater than 1:-1.

17. (Original) A reading apparatus according to claim 10 wherein the inverting optics provide magnification less than 1:-1.

18. (Original) A reading apparatus according to claim 10 wherein adjacent segments of the line are substantially contiguous.

19. (Original) A reading apparatus according to claim 10 wherein the transport mechanism comprises a continuous belt.

20. (Original) A reading apparatus for obtaining a line of image data stored on a surface, comprising:

(a) a radiation source for directing a line of stimulating radiation onto a stimulable image carrier on the surface, generating a line of image-bearing radiation thereby;

(b) a first sensing head and a second sensing head for obtaining image data from the line of image-bearing radiation excited from the image carrier, each sensing head including an array of sensors and having a plurality of channels, each channel sensing a segment of the line of image-bearing radiation, and each channel comprising:

(i) inverting optics for inverting the segment of the line of image-bearing radiation to form an inverted line segment image; and

(ii) a corresponding sensor from the array of sensors for providing image data for the inverted line segment image; and

(c) an image processor for accepting the image data obtained from each of the first and second sensing head channels and forming a line of image data according to the line of image-bearing radiation.

21. (Original) A reading apparatus according to claim 20 wherein with respect to the length of the line of image-bearing radiation, line segments sensed by channels on the first sensing head are offset from line segments sensed by channels on the second sensing head.

22. (Original) A reading apparatus according to claim 20 wherein the segments of the line of image bearing radiation for a channel are substantially contiguous.

23. (Original) A reading apparatus according to claim 20 wherein the radiation source comprises a laser.

24. (Original) A reading apparatus according to claim 20 wherein the sensor comprises a charge-coupled device.

25. (Original) A reading apparatus according to claim 24 wherein the sensor is a time delayed integration sensor.

26. (Original) A reading apparatus according to claim 20 wherein the sensor comprises a CMOS device.

27. (Original) A reading apparatus according to claim 20 wherein the inverting optics are arranged in a shifted pattern, such that adjacent channels for the first sensing head are spatially shifted with respect to the width of the line of excited radiation.

28. (Original) A reading apparatus according to claim 20 wherein the inverting optics for the first sensing head provide magnification greater than 1:-1.

29. (Original) A reading apparatus according to claim 20 wherein the inverting optics for the first sensing head provide magnification less than 1:-1.

30. (Original) A reading apparatus according to claim 20 further comprising a transport mechanism for controllably urging the image carrier past the first and second sensing heads for obtaining sequential lines of image data.

31. (Currently Amended) A method for obtaining a line of image data stored on a surface, comprising:

(a) emitting a line of stimulating radiation onto a stimulable image carrier on the surface, generating a line of image-bearing radiation thereby; and

(b) generating image data from the line of image-bearing radiation excited from the image carrier by:

(i) optically inverting substantially congruent segments of the line of image-bearing radiation to form a plurality of images of inverted line segments using separate inverting optics for each substantially congruent segment;

(ii) sensing radiation from~~,~~ and providing output data for~~,~~ each image ~~in~~of the plurality of images of inverted line segments using a separate light sensor element of a sensor formed from an array of light sensor elements; and

(iii) forming a line of image data according to the output data for congruent images in the plurality of images of inverted line segments.

32. (Original) A method for obtaining a line of image data according to claim 31 wherein the step of forming a line of image data comprises the step of inverting the output data for each image in the plurality of images of inverted line segments.

33. (Currently Amended) A method for obtaining a line of image data according to claim 31 wherein ~~the step of~~ sensing radiation comprises ~~the step of~~includes directing the image~~s~~ of the inverted line segment~~s~~ to ~~an~~the corresponding light sensor element of the array of light sensor~~s~~ elements.

34. (Original) A method for obtaining a line of image data according to claim 31 wherein the step of optically inverting substantially congruent segments comprises the step of providing greater than 1:-1 magnification.

35. (Original) A method for obtaining a line of image data according to claim 31 wherein the step of optically inverting substantially congruent segments comprises the step of providing less than 1:-1 magnification.

36. (Original) A method for obtaining a line of image data according to claim 31 further comprising the step of urging the surface forward incrementally in a direction that is substantially orthogonal to the line of image-bearing radiation.

37. (Currently Amended) A method for obtaining an image formed from successive lines of image data stored on a surface, comprising a repeated sequence of:

(a) emitting a line of stimulating radiation onto a stimulable image carrier on the surface, generating a line of image-bearing radiation thereby;

(b) generating image data from the line of image-bearing radiation excited from the image carrier by:

(i) optically inverting congruent segments of the line of image-bearing radiation to form a plurality of images of inverted line segments using separate inverting optics for each substantially congruent segment;

(ii) sensing radiation from, and providing output data for, each image ~~in~~of the plurality of images of inverted line segments using a separate light sensor element of a sensor having an array of light sensor elements; and

(iii) forming a line of image data according to the output data for congruent images in the plurality of images of inverted line segments; and

(c) urging the surface forward incrementally in a direction that is substantially orthogonal to the line of image-bearing radiation.